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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,818	03/12/2001	Hon Ching Yung	9661-0011	1329
20583	7590	09/28/2004	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			DIXON, THOMAS A	
			ART UNIT	PAPER NUMBER
			3629	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,818

Applicant(s)

YUNG ET AL.

Examiner

Thomas A. Dixon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/01, 1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 03/13/01 has been considered by the examiner.
2. The information disclosure statement (IDS) submitted on 01/29/2004 has not been considered by the examiner as it is a duplicate of the previous IDS.

Claim Interpretation

3. Claims directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 582, 531 (CCPA 1959).

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1657 (bd Pat. App. & Inter. 1987). Thus the structural limitations of claims 1, 15, 21, 37 are disclosed as described herein. Also as described the limitations of the claim do not distinguish the claimed apparatus from the prior art.

Claim Objections

4. Claims 1,2,3,5, 23, 46-47 are objected to because of the following informalities:

As per Claims 1,2,3,5 the words communicating and communicated appear to be idiomatic English.

As per Claim 23, the word "simulate" seems out of place or incomplete, simulate what? a coin mechanism sensing a coin deposit?

As per Claim 46, the word "presence" appears to be idiomatic English.

As per Claim 47, the phrases "to an agreed report format" appears to be idiomatic English, the specification, pg 19 refers to it as "in a pre-defined report format". Further, the software package features "for managing database...appropriate level of management" are not supported by the specification, but could be inserted to provide support as they are in the claims as originally presented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1-3, 6, 8-9, 11-13, 20-27, 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Martshitsch et al (6,764,003).

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As per Claim 1.

Martschitsch et al ('003) discloses:

a controller device for controlling vending operations of the vending machine, see figure 1 (41);

a wireless modem device for communicating between the controller device, the wireless modem being adapted to receive via the network a short message originated from a purchaser and to communicate the short message to the controller device, column 4, lines 62-67;

whereby, upon receipt of the short message, the controller device initiates a vending operation, controls the vending operation and communicates transaction to the vending operation to a central computer, see column 5, line 37 – column 8, line 67.

As per Claim 2.

Martschitsch et al ('003) further discloses a cpu, data and program memory, see column 4, lines 14-16.

As per Claim 3.

Martschitsch et al ('003) further discloses a transceiver and a programmable interface, see column 4, lines 14-16.

As per Claim 6, 16, 22.

Martschitsch et al ('003) further discloses sending a short message to the central computer, see column 5, lines 37-55.

As per Claim 8, 17, 23.

Martschitsch et al ('003) further discloses a vending circuit, see column 4, lines 40-47.

As per Claim 9, 19.

Martschitsch et al ('003) further discloses a coin detection, see column 4, lines 47-57.

As per Claim 11, 18, 24.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46.

As per Claim 12.

Martschitsch et al ('003) further discloses communicating information to the wireless modem, and the wireless modem adapted to communicate transaction information to a central computer via the network, see column 5, line 37 – column 8, line 67.

As per Claim 13.

Martschitsch et al ('003) further discloses sending a short message to the central computer, see column 5, lines 37-55.

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As per Claim 20, 25.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46, and a selection button, see figure 1 (46).

As per Claim 21.

Martschitsch et al ('003) discloses:

a vending machine for storing and dispensing merchandise, see figure 1 (4);

a quantity counter circuit being adapted to obtain merchandise quantity data from the vending machine and for communicating the quantity data to a controller device, see column 5, lines 14-17, and column 6, lines 26-30;

a controller device for acquiring inventory and transaction data and controlling vending operations of the vending machine, the controlling device being adapted to initiate a vending operation upon receipt of a first short message service originated from a purchaser, to collect transaction information about the vending operation, to transmit the transaction information and the merchandise quantity data to a central computer, see column 5, lines 14-17 and column 9, lines 42-48;

a wireless modem for communicating between a network and the controller device, the wireless modem being adapted to receive via a network a short message service originated from a purchaser and transmit the short message service to the controller device, the wireless modem being also adapted to communicate the transaction information and the merchandise quantity data from the controller to a central computer, see column 5, line 37- column 8, line 67;

a central computer for communicating with the wireless modem via the network, the central computer being adapted to store the transaction information and the merchandise quantity data as setting information when the vending machine when the vending machine comes on-line, see column 5, line 37- column 8, line 67.

As per Claim 26.

Martschitsch et al ('003) further discloses a coin detection, see column 4, lines 47-57, a display, see column 4, lines 44-46.

As per Claim 27.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46 and a button, see figure 1 (46).

As per Claim 32.

Martschitsch et al ('003) discloses:

receiving a purchase request, see column 5, line 37- column 8, line 67 ;

converting the purchase request to a short message, see column 5, line 37- column 8, line 67; and

transmitting the short message to a vending machine to initiate a vending operation, see column 5, line 37- column 8, line 67.

As per Claim 33.
Martschitsch et al ('003) discloses:
sending a purchase request through a cellular phone, see column 5, line 37-
column 8, line 67;
selecting merchandise from a display panel of the vending machine, see column
5, line 37- column 8, line 67; and
obtaining the selected merchandise from the vending machine, see column 5,
line 37- column 8, line 67.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5, 15, 28-31, 34-36 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Martshitsch et al (6,764,003) in view of Kolls (6,056,194).

As per Claim 4
Martschitsch et al ('003) discloses sending a dispense signal to the vending
machine, but does not specifically disclose simulation, however applicant's disclosed
reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase
signal to a vending machine as a well known method for initiating a vending operation.
Therefore, it would have been obvious to one of ordinary skill in the art, at the
time the invention was made to simulate a purchase signal to a vending machine as a
well known method for initiating a vending operation.

As per Claim 5.
Martschitsch et al ('003) further discloses a programmable interface, see column
4, lines 14-16.

As per Claim 15.
Martschitsch et al ('003) discloses:
a vending machine for storing and dispensing merchandise, see figure 1 (4);
a controller device for controlling vending operations of the vending machine, the
controlling device being adapted to initiate a vending operation and transmit transaction
information of the vending operation to a central computer, see column 5, line 37 –
column 8, line 67;

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a wireless modem for communicating between a network and the controller device, the wireless modem device being adapted to receive via the network a short message originated from a purchaser and to communicate the short message to the controller device, the wireless modem also being adapted to receive the transaction information from the controller device and communicate the transaction information to a central computer, see column 5, line 37 – column 8, line 67;

a central computer for communicating with the wireless modem via the network, the central computer being adapted to receive and store the transaction information transmitted by the controller device, see figure 1 (3);

whereby, upon receipt of the short message originated from the purchaser, the controller device simulates and sends a purchase signal to the vending machine to thereby initiate the vending operation and sends the vending transaction information to the central computer, see column 5, line 37 – column 8, line 67.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 28.

Martschitsch et al ('003) discloses:

receiving a short message, see column 5, line 37- column 8, line 67;

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 29.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 30.

Martschitsch et al ('003) further discloses collecting transaction information and transmitting it to a central computer, see column 9, lines 42-48.

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As per Claims 31, 35.

Martschitsch et al ('003) further discloses converting the transaction information to a second short message, see column 5, lines 42-55.

As per Claims 34, 36.

Martschitsch et al ('003) discloses:

receiving a first short message originated from a purchaser, see column 5, lines 37- 45;

receiving a merchandise selection message from the purchaser, see column 6, line 5- column 8, line 67;

dispensing a selected merchandise from the vending machine, see column 5, line 37- column 8, line 67;

collecting transaction information about the vending operation, see column 9, lines 42- 48; and

transmitting the transaction information to a central computer where the transaction information is processed, see column 5, line 37- column 9, line 66.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose coin mech simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

7. Claims 7, 10, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martshitsch et al (6,764,003) in view Defosse (6,547,038).

As per Claim 7.

Martschitsch et al ('003) discloses a power supply which may be a battery and or solar cells, see column 4, lines 57-61, but does not specifically disclose a power circuit and a backup battery, however Defosse ('038) figure 2 teaches a power supply (68) and a battery backup (74) a backup and a hardware interface bus (67) and microprocessor (64) as a well known method for ensuring power to a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have a power circuit with a battery backup for the benefit of ensuring power to a vending operation

As per Claim 10.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose an out of stock alert, however Defosse ('038) column 5, lines 14-28 for the benefit of central control of a vending operation.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the out of stock alert of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 14.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose a quantity counting, however Defosse ('038) column 6, lines 22-33 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the quantity counting of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

8. Claims 37, 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martshitsch et al (6,764,003) in view of Kolls (6,056,194) further in view of Stapp (5,930,771), further in view of DeFosse (6,457,038) further in view of Etoh et al (5,963,452).

As per Claim 37.

Martschitsch et al ('003) discloses:

a control and communications unit means, see figure 1 (41);

a vending event means (42);

a vending event controlling means (42);

a vending transaction means (36, 42, 412)

a transaction information storage means (41)

a transaction communication means (411)

a wireless modem means (411)

a display panel means (45)

a merchandise dispensing interface means (47)

a merchandise selection means (46)

a coin mech signal detection means (48)

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose coin mech simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Martschitsch et al ('003) discloses sending transaction data to a central computer, but does not specifically disclose an inventory data acquisition means or date and time data, however applicant's disclosed reference Stapp ('771) column 4, lines 10-25 teaches inventory data acquisition and to monitor and record coins/bills/debit card

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transactions, timestamp and record transactions of a vending machine as a well known method for initiating a vending operation.

Martschitsch et al ('003) discloses battery or solar power supply, but does not specifically disclose power management, however Defosse ('038) figure 2 (67, 64) teaches a hardware interface bus and microprocessor capable of power management of a vending machine as a well known method for powering a vending machine.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose alert means or communication, a service switch or out of stock alert, however Defosse ('038) column 5, lines 14-28 for the benefit of central control of a vending operation.

Martschitsch et al ('003) discloses sending transaction data to a central computer, but does not specifically disclose an error correction, however applicant's disclosed reference Etoh et al ('452) figure 4(layer 2) teaches error correction as a well known method for communications protocols.

Martschitsch et al ('003) discloses sending a transaction message, but does not disclose the message format claimed, but in an apparatus claim the message format does not distinguish over the prior art.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal, timestamp and store transaction data and inventory of a vending machine as a well known method for initiating and managing a vending operation and well known to send error correction as part of the data transmission.

As per Claim 40.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose a quantity counting, however Defosse ('038) column 6, lines 22-33 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the quantity counting of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 41.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 42.

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Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose an out of stock alert, however Defosse ('038) column 5, lines 14-28 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the out of stock alert of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 43

Martschitsch et al ('003) further discloses a dispensing device, see column 4, lines 40-47.

As per claim 44.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46 and a button, see figure 1 (46).

As per Claim 45.

Martschitsch et al ('003) discloses battery or solar power supply, but does not specifically disclose power management, however Defosse ('038) figure 2 (67, 64) teaches a hardware interface bus and microprocessor capable of power management of a vending machine as a well known method for powering a vending machine.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have a power control as taught by Defosse ('038) as a well known method for powering a vending machine..

As per Claim 46.

Martschitsch et al ('003) discloses sending a transaction message, but does not disclose the message format claimed, but in an apparatus claim the message format does not distinguish over the prior art.

8. Claims 38, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martshitsch et al (6,764,003) in view of Kolls (6,056,194) further in view of Stapp (5,930,771), further in view of DeFosse (6,457,038) further in view of Etoh et al (5,963,452) further in view of Batalianets et al (5,495,929).

As per Claim 38.

Martschitsch et al ('003) further discloses:

a central processing unit means, see column 5, line 16;

a memory unit means, 41);

a peripheral interface unit means (41, 414, 412, 43);

a serial interface, see column 5, line 13.

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Martschitsch et al ('003) does not specifically disclose a realtime clock, however applicant's disclosed reference Stapp ('771) figure 1 (36) teaches realtime clock as a well known method for providing input for timestamping credit/debit transactions in a vending operation.

Martschitsch et al ('003) does not specifically disclose a watch-dog circuit means for providing a soft reset to the micro-controller when certain predefined conditions are met, however Batalianets et al ('929) column 5, lines 40-53 teaches watch-dog circuits for resetting micro-controllers are well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have a realtime clock in Martschitsch et al ('003) as taught by Stapp ('771) and a watch-dog circuit as taught by Batalianets et al ('929) for the benefit of timestamping credit/debit transactions and resetting a micro-controller in a vending machine.

As per Claim 39.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose an out of stock alert, however Defosse ('038) column 5, lines 14-28 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the out of stock alert of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

Prior Art Made of Record

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simpson et al (6,478,187) discloses use of cell phone for vending machine purchases and vending machine inventory, but does not disclose short messages.

Kemp (WO 01/54087) discloses use of a cell phone to get merchandise from a vending machine with a central computer.

New BellSouth Technology... discloses vending machine inventory monitoring using short messages.

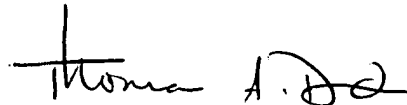
Mobile Devices and the Internet discloses using a cell phone and short messages to get drinks from a vending machine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (703) 305-4645. The examiner can normally be reached on Monday - Thursday 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas A. Dixon
Primary Examiner
Art Unit 3629

September 04